IMPERIAL

DEPARTMENT OF AGRICULTURE

FOR THE WEST INDIES.

IMPERIAL MYCOLOGICAL INSTITUTE
12 FEB. 1931

REPORT

ON THE

AGRICULTURAL DEPARTMENT

ST. KITTS-NEVIS

1929-30.

ISSUED BY THE IMPERIAL COMMISSIONER OF AGRICULTURE

FOR THE WEST INDIES.

1930.

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Imperial College of Tropical Agriculture,

Trinidad,

Commissioner of Agriculture to Administrator St. Kitts.

LETTER OF TRANSMITTAL.

His Honour,
The Administrator,
St. Kitts, B.W.I.
C. A. 698.

Sir,

I have the honour to transmit the Report on the Agricultural Department, St. Kitts-Nevis, during the year ended March 31st, 1930.

The increased interest in the fruit and vegetable trade for the Northern markets is largely responsible for the greater amount of planting material sent out from the Stations, both in St. Kitts and Nevis.

The cotton crop (1929) for St. Kitts amounted to some 327,300 lb. lint from 1,400 acres or about 230 lb. per acre. The Government Cotton Seed Farm produced 18,370 lb. lint on 68 acres; about 270 lb. per acre. The Anguilla 1929-30 crop amounted to about 51,000 lb. which is the largest production since 1920, and the Nevis 1928-29 crop yielded some 406,900 lb. from an estimated area of 1,500 or at the rate of 270 lb. per acre.

These yields are very satisfactory, but the prospect for the following crops were less encouraging. In Nevis the 1929-30 crop was planted in October 1929 and made a good start, but unusual rain in January 1930 together with severe attacks of the cotton worm, followed by drought conditions in February-March have combined to reduce the crop. In St. Kitts the crop was planted early in March and drought conditions followed almost at once, making it difficult to get the crop established and retarding the growth of the plants.

The 1927-29 crop of sugar cane produced a low yield of sugar, 13,724 tons which sold at very low prices. This crop was affected by the long dry spell preceding the hurricane of

September 1928, and the crop to be reaped in 1930 had received a set back by a severe dry spell in September 1929.

Mosaic disease of sugar cane appears to have been eradicated from St. Kitts as no cases of this disease have been observed for several years. There has been no increase of gumming disease during the year.

The moth borer continued to be the principal pest of the sugar cane in St. Kitts. The pink boll worm of cotton was very little in evidence in any of the Islands of the presidency, and the cotton worm was troublesome only in Nevis.

Agriculture in Nevis is now largely in the hands of peasant growers. Of the 2,500 acres of cotton grown in 1929-30 some 2,000 acres were grown by peasants. A land settlement scheme which would enable a larger number of the peasants to own their land would seem certain to produce a more satisfactory condition in the Island. Sugar and cotton are the staple products of these islands. At the present time the prices are very low, and as regards sugar the situation is as serious as at any time in the history of the West Indies. Sea Island cotton is not in great demand, and the West Indian crop is more than enough for the world's needs.

These conditions make it necessary to turn to such other crops and markets as may be available. Of these the most obvious and most important are the markets for tropical fruits and out of season vegetables at Bermuda and in Canada. St. Kitts and Nevis should be able to take part in the trade that is almost certain to be developed in fruits and vegetables in the Northern markets.

I have the honour to be,

Sir,

Your most obedient servant,

(Sgd.) H. A. BALLOU.

Commissioner of Agriculture,

Imperial College of Tropical Agriculture.

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STAFF OF THE AGRICULTURAL DEPARTMENT, ST. KITTS-NEVIS.

Agricultural Superintendent ..	.. R. E. KELSICK.
Junior Clerk and Cotton Inspector, St. Kitts ..	D. C. TODD.
Agricultural Instructor, Nevis ..	.. W. I. HOWELL.
Cotton Inspector, Nevis ..	.. J. H. STEVENS.

Report of the Agricultural Department St. Kitts — Nevis.

FOR THE YEAR ENDED 31ST MARCH, 1930.

DISTRIBUTION OF PLANTS.

The distribution of plants during the year is as follows:

Flowering shrubs and trees	131	
Ornamental foliage trees	92	
Ornamental plants	194	
Casuarina	102	
Julie Mango	50	
Pineapple suckers	5,650	
Papaw	28	
Guava	6	
Grape	1	
Onion seedlings	300	
Sugar cane cuttings	3,186	
Sweet potato cuttings	2,000	
Cotton Seed	46,344	lb.
Onion seed	20	lb.
Vegetable seeds	26	pkts.

INTRODUCTION OF PLANTS.

Pineapple suckers of the Red Spanish and Black Antigua varieties were imported from Trinidad, Grenada and Antigua. Seeds of the Cape Gooseberry (*Physalis peruviana*) and of an English variety of melon "Royal Sovereign" were presented to the station by His Honour the Administrator.

PLOT EXPERIMENTS.

GROUND NUTS.

The varieties Carolina Running Virginia Runner, African

and Jumbo were grown. Each plot was 450 square feet and there were four replicates of each variety. The plots were planted on the 14th May, 1929 and reaped on the 30th September, 1929. The average yields of undried nuts in pounds per acre are shown below:

Variety.	Yield in lb. per acre.
Virginia Runner	1,700
Carolina Running ..	1,430
Jumbo	1,300
African	1,190

The varieties Virginia Runner and Carolina Running are very similar in appearance, but the nut of the Virginia variety is somewhat larger.

YAMS.

The following varieties of yams were grown: Danish, Bottle Neck Lisbon, Statia and Crop. All the varieties were seriously affected by the drought in September.

PINEAPPLES.

Two small plots of the Red Spanish and Red Ripley varieties were grown. The suckers of the Red Spanish variety were obtained from Grenada in July, 1929, but their growth has been somewhat slow as a result of unfavourable weather conditions. The Ripley variety has made satisfactory growth and should give a crop of fruit in 1930.

SWEET POTATOES.

The following varieties of this crop were grown: Spooners, Brass Cannon, Caroline Lee, Hug-me-tight, Montserrat Emma, Sorry for the poor, Harris and Todd.

CASSAVA.

The following varieties of cassava were grown: French No. 3, White Greenaway, Black Stick, Jack Roe, Sweet No. 1. French No. 3 is a very heavy yielding variety.

TOMATOES.

The following varieties of tomato were experimented with: Beauty, Marglobe, Stone, Ponderosa, Earliana and Bonny Best. Weather conditions were unsatisfactory and yields were consequently low. The following observations were made: the varieties Ponderosa and Beauty produce a fruit too large for export purposes, but they are valuable for the local trade. The fruit of the Stone variety is too much on the flat side. The shape of the Marglobe is excellent but the skin is somewhat tender. Bonny Best is an early variety and a heavy fruiter. The fruit is of medium size and good shape. In this variety uniformity in the shape of fruit from plant to plant was not very satisfactory and it is evident that a good deal of care will have to be given to the seed supply for growing vegetables on a commercial scale.

COTTON SELECTION.

Twenty-eight single-plant selections were planted out in 1929. Lint from seven of these was sent to the brokers, Messrs. Wolstenholme & Holland of Liverpool, for valuation. The characters of these and the brokers' valuations are set out in the table below.

No. of Row.	Seed Cotton per boll. Grms.	Lint weight per boll Grms.	Mean Max. Liut Length in Mms.	Lint Index Mgms.	Valuation per lb.
4	4·35	1·32	51	49	31 d.
5	3·97	1·15	51	46	30 d.
9	3·73		50		30 d.
18	3·92		50		29 d.
20	3·95	1·13	53	45	33 d.
21	3·64	1·05	50	48	32 d.
23	3·48	1·13	50	51	31 d.

The following figures indicate that the uniformity of the characters of the type 20 is satisfactory.

MEAN MAXIMUM LENGTH OF LINT.

	Lint Length in M. M.				Mean.
	51	52	53	54	
20/1	2	5	11		53
20/2	1	3	10	3	53
20/3		2	13		53

MEAN WEIGHT OF LINT PER SEED.

	Weight of Lint per Seed M.G.					Mean.
	41	44	47	50	53	
20/1	3	7	5			44
20/2	3	8	4			44
20/3		7	5	2	1	46

MEAN SEED WEIGHT.

	Weight of Seed in M.G.							Mean.
	103	108	113	118	123	128	133	
20/1	3	3	5	1	1	1	1	113
20/2		3	3	5	4			116
20/3			1	...	9	5		124

GOVERNMENT COTTON SEED FARM.

Sixty-eight acres of cotton were planted on the farm in 1929. Planting was started on the 13th March after a fall of 0.62 inches of rain. There was excellent weather for the rest of the month which enabled the crop to be satisfactorily established in a short time. The rainfall in the months of April and May was somewhat low, 1·23 and 2·57 inches respectively. At the end of May the crop was somewhat backward but there was marked improvement in June as a result of very favourable weather and the crop turned out much better than was at first expected.

The total amount of seed cotton picked was 68,688 lbs. which yielded 16,899 lbs. clean cotton and 1,471 lbs. stained cottton a total of 18,370 lbs. lint and an average yield of 270 lbs. lint per acre. The stained cotton only amounted to 3 per cent. The crop was about three times as large as the 1928 crop and the largest for many years. 22,075 lbs. of hand picked and fumigated cotton seed was sold to growers in St. Kitts and 24,259 lbs. of fumigated seed was supplied to Nevis and Anguilla. Seed was obtained from Spooners Cotton Ginnery to supplement the amount produced on the farm.

WORK CONNECTED WITH INSECT AND FUNGUS PESTS AND THEIR CONTROL.

SUGAR CANE.

Gumming Disease.

As far as can be ascertained there has been no increase of this disease on the island during the period under review. All susceptible varieties are being eliminated from cultivation and the position may be regarded as satisfactory.

Mosaic Disease.

No case of mosaic disease was observed during the year.

Moth Borer.

The cane borer (*Diatraea saccharalis*, Fabr.) continues to be the major sugar cane pest Each year this insect does a considerable amount of damage to the sugar cane crop. Its attacks not only decrease the yields in the fields, but also reduce the purity of the juice and consequently the output of sugar by the factory.

COTTON.

Insect pests were not responsible for any serious damage to the cotton crop of 1929. There were attacks of the leaf worm

(*Alabama argillacea*) in some parts of the island, but these were satisfactorily controlled; and the pink bollworm (*Pectinophora gossypiella*) did very little damage.

DISINFECTION OF PLANTS AND SEEDS.

As required by law all seeds and plants imported into the island were inspected at the Experiment Station, and, where necessary, fumigated.

WORK IN THE CHEMICAL LABORATORY.

Samples of the following were attended to during the year; Milks, Manures, petroleum oils, cane juices, soils, seed cotton and waters.

PROGRESS IN CHIEF INDUSTRIES.

THE SUGAR CANE INDUSTRY.

The season of growth of the 1927-29 sugar cane crop was distinctly unfavourable. The average rainfall for October, November and December, 1927, was 19·00 inches and consequently the conditions for the germination of the plants were distinctly favourable. The average rainfall for 1928 was 53·25 inches. For the first six months of the year there were only 16 inches of rain and the young crop suffered from lack of moisture. The canes recovered to some extent in July and August but were severely damaged by the hurricane in September. As a result of very favourable weather conditions in October. November and December, the crop made a good recovery but received a set back from the dry spell in the early months of 1929.

For the 1927-29 crop 6,950 acres were reaped and the Basseterre Factory manufactured 13,724 tons of grey crystal sugar from 120,364 tons of cane. The average yield of the island was 17·32 tons of cane and 1·96 tons of sugar per acre. The highest average yield was 28 tons of cane per acre. The average price obtained for the sugar was £11. 16. 4. per ton, the lowest price for very many years. The price paid by the Basseterre Factory to the estates for canes was 13s. 11·12d. per ton. As the cost of growing a ton of cane is about 18s., it will be seen that the losses sustained by estates have been very considerable.

For the 1928-30 crop about 6,900 acres of cane will be reaped and it is estimated that the crop will be about 17,000 tons of sugar.* The canes in the Basseterre Valley district received a severe set-back from the drought of September, 1929.

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*(Final figures for the crop were 18,700 tons of sugar).

SUGAR CANE VARIETY TRIAL

The variety trial, which was laid down at the Experiment Station in November, 1928, was reaped on the 10th and 11th February, 1930.

The field, which was used for the experiment, was not of very high fertility, but it was the best available at the time. A green dressing of horse beans (*Canavalia*) was turned under early in December and an application of Humber fish manure at the rate of 700 lb. per acre was given to the canes when they were about two months old.

The canes were planted in holes 4 feet by 4 feet and the plots were laid out in strips replicated four times with the standard cane B.H. 10.12. Fifty holes were weighed from each plot.

The results obtained are given in the tables below:

TABLE I.

Variety.	Mean yield of Cane Tons per acre.	Mean Difference of yields	* S. D.	* S. E.
S. C. 12/4	33·4	+ 11·2	3·84	1·92
B. H. 10.12	19·2			
B. 381	28·5	+ 3·3	2·38	1·19
B. H. 10.12	25·2			
B. 417	28·1	+ 5·7	1·35	0·68
B. H. 10.12	22·4			
B. 8069	24·0	+ 0·3	0·93	0·47
B. H. 10.12	23·7			
Ba. 9924	21·8	+ 0·3	3·37	1·69
B. H. 10.12	21·5			

*S.D.=Standard Deviation.
*S.E.=Standard Error.

TABLE II.

Variety.	Mean yield of Sucrose lb. per acre.	Mean Difference of yields
S. C. 12/4	8,080	+ 3,250
B H 10.12	4,830	
B. 381	6,760	+ 580
B. H. 10.12	6,180	
B. 417	6,590	+ 1,440
B. H. 10,12	5,150	
B. 8069	4,760	- 890
B. H. 10.12	5,650	
Pa. 7924	4,320	- 310
B H 10.12	4,630	

TABLE III.

COMPOSITION OF JUICE

Variety.	No. of Plots.	Brix.	Sucrose lb. per gallon	Sucrose per cent	Quotient of purity.
B. H. 10.12	19	20·3	2·06	19·08	94·0
S. C. 12.4	4	19·9	2·02	18·72	93·9
B. 381	4	20·0	2·02	18·73	93·7
B. 417	4	19·3	1·91	17 75	92·3
B. 8069	4	18·5	1·79	16·67	90·1
Ba. 7924	3	17·3	1·69	15·80	91·5

The varieties S.C. 12/4, B.381 and B.417 have given significant differences in yield over B.H. 10.12 under the climatic conditions of the season at La Guerite and under the conditions of the experiment. It is the general opinion among sugar planters in St. Kitts that the variety B.H. 10.12, although an excellent cane in most respects, does not do well under dry conditions. Trials on a larger scale are being made with B.381 and B.417.

SUGAR CANE VARIETIES CULTIVATED.

The following table shows the acreage under different varieties of sugar cane in St. Kitts for the crop to be reaped in 1930.

Name of Cane.	Acres.
B.H. 10.12	4,836
S.C. 12.04	1,208
D.116	90
B.417	38
Ba.11569	26
A.2	14
Ba.7924	11
B.S.F. 12.24	10
B.S.F. 12.27	2
B.6450	3
White Tanna	1
D.216	1
Mixed	717
Total	6,957

It will be seen that the cane B.H. 10.12 occupied about 70 per cent of the acreage. On the whole this cane has given excellent results in St. Kitts. It has not been found to stand up to periods of drought as well as the variety S.C. 12/4. The seedling Ba.11569 promised to be an exceedingly useful variety but it had to be abandoned as it was found to be very susceptible to gumming disease.

The following varieties were introduced for trial in 1928 and 1929: P.O.J. 2725 and 2878, Barbados seedlings 381, 417, 606, 374 and 726, and Guadeloupe seedling 119. In 1931 there should be fairly large observation plots of these varieties on the estates and it is hoped that variety yield trials of some of these varieties will be laid out at the end of 1930 at three stations.

The Agricultural Department and the planters are fully alive to the necessity of testing out new varieties which are produced at cane breeding stations in the West Indies and elsewhere and every endeavour is made to introduce such new varieties as soon as cuttings are obtainable, provided serious risk of introducing new cane diseases does not exist.

MANURIAL EXPERIMENT WITH SUGAR CANE.

A fertilizer trial was laid out at Molineux estate in December, 1929. The layout adopted was the system of randomised blocks giving four replicates for each treatment. The plan of the experiment was prepared by the Imperial Department of Agriculture at Trinidad. The canes will be reaped early in 1931 and very useful data on the fertilizer requirements of the sugar cane should be obtained.

THE COTTON INDUSTRY.

ST. KITTS.

Most of the cotton was planted early in March and well distributed rains throughout the planting season gave the crop a most excellent start and by the end of the month it was well established throughout the island. The crop in the the Valley district was affected to some extent by the drought in May. Attacks by the cotton leaf worm (*Alabama argillacea*) were not severe and there was very little damage to the first crop by the pink bollworm.

The area under cotton was 1,400 acres, and the total output of the island was 327,299 lbs. of lint, a yield of about 230 lbs. lint per acre. The amount of stained cotton was under 8 per cent. The crop was the largest one for many years, and on more than one estate an average yield for over 350 lbs. per acre was obtained. The export of cotton from the Presidency for the year ended 31st December, 1929, was 690,068 lbs. lint valued at £66,407. The crop was the largest since 1919.

NEVIS.

A report on the industry in Nevis is given in the report of the Agricultural Instructor of that island.

ANGUILLA.

The cotton crop in Anguilla was planted from the 15th August, 1929. The rainfall figures given below show that weather conditions were excellent during the season:

	Inches
August	4.71
September	4.63
October	4.71
November	4.11
December	2.89
January	4.35
February	0.50
March	2.04

The crop amounted to 51,118, lbs. lint. Reliable figures for the total acreage are not available, but a yield of 280 lbs. lint per acre was obtained by one grower from 40 acres. This is the largest cotton crop in Anguilla since 1920. In recent years very little cotton has been produced in Anguilla, but for the past three years a great deal more interest has been taken in cotton cultivation and the production has nearly returned to a normal level. The decline of the industry since 1921 may be attributed to the pink bollworm. At first the cotton growers did not realise the damage that could be inflicted on their crops by this insect, and it is only after adequate measures for its control have been adopted and enforced that it has been possible again to produce moderately good crops of cotton on the island.

PLANT LEGISLATION.

Ordinance No. 3 of 1907. "The Fumigation of Plants Ordinance" enforces the fumigation of all imported plants at the direction of the local Agricultural Officer.

Ordinance No. 18 of 1918. "The Cotton Ordinance" regulates the planting of cotton and provides for the destruction of cotton plants.

Ordinance No. 6 of 1923. "The Cotton Ordinance Amendment Ordinance" provides for the inspection of land before the planting of a new crop.

Ordinance No. 2 of 1923. "The Plant Protection Ordinance" provides for the prevention and eradication of diseases and pests affecting vegetation.

Proclamation dated October 21, 1910, prohibits the importation of banana plants from the countries of Central and South America and from the islands of Trinidad and Tobago.

Proclamation dated October 21, 1910, prohibits the importation of coconuts from Cuba, Jamaica, Trinidad and all parts of Central and South America.

Proclamation dated November 3, 1916, prohibits the importation of citrus plants and fruits from the countries of the United States of America, Cuba, Jamaica, Haiti, San Domingo and Porto Rico.

Proclamation dated March 5, 1919, prohibits the importation of growing or sprouted coconuts from the islands of Trinidad and Grenada.

Proclamation dated November 16, 1920, prohibits the importation of sugar canes or parts of sugar canes from all countries save under license given by the Governor.

Proclamation dated December 28, 1922, prohibits the importation of bananas from all places save other Presidencies of the Leeward Islands, Grenada, St. Vincent and Barbados.

Proclamation dated November 13, 1923, prohibits the importation of growing or sprouting coconuts from St. Vincent.

Proclamation dated April 2, 1925, prohibits the importation of seed cotton or cotton seed from all countries and places outside the Presidency of St. Kitts-Nevis except under the written permission of the Governor on such terms and conditions as he may prescribe.

Proclamation dated April 2, 1925, prohibits the importation of banana suckers, save and except banana suckers imported from other Presidencies of the Leeward Islands, St. Vincent and Barbados.

Statutory Rules and Orders, No. 2 of 1930, prohibits the importation directly or indirectly from all places in the United States of America, Central America, South America, Bermuda, Spain, Italy and France of all pears, apples, peaches, nectarines, apricots, plums, cherries, grapes, citrus fruits and succulent fruits of every kind.

NOTES ON MATTERS OF AGRICULTURAL INTEREST.

Agricultural and Industrial Exhibition. An Agricultural and Industrial Exhibition was held on January 9, 1930, at Warner Park. The Exhibition was very successful and was well attended.

The Exhibits were, on the whole, very satisfactory. The flowers and vegetables were much better than those exhibited in 1928. Exhibits by the elementary schools were very disappointing.

The Exhibition was opened by His Honour the Administrator.

Fruit and Vegetable Growers' Association. A Fruit and Vegetable Growers Association was formed during the year for the purpose of developing a fruit and vegetable trade with Canada during the winter months. At an interview with Messrs. J. A. McBride of Fruit Importers Limited, Montreal, and F. E. Holloway of Mutual Brokers Montreal Limited, members of the Association were advised to concentrate their endeavours on tomatoes and English potatoes. These gentlemen were of the opinion that both of these vegetables could be sold in Canada during the winter months at remunerative prices provided careful attention was given to grading and packing.

The Association handled about 11,000lb. of potatoes during the year. The local market absorbed a large proportion of these and the rest were shipped to the Southern islands.

West Indian Sugar Commission. The members of the West Indian sugar commission arrived in the island on the 29th October and left on the 31st. The Commission held two public sessions at which fifteen witnesses were examined. The Agricultural Superintendent gave evidence and presented a memorandum on the sugar industry in St. Kitts.

EXPORTS OF COTTON.

The following table gives the exports of cotton lint from the Presidency for the twenty-six years ended September 30, 1929.

Year.	St. Kitts lb.	Nevis lb.	Anguilla lb.	Total. lb.
1904 ..	24,197	28,449	1,661	54,307
1905 ..	78,219	114,721	31,452	254,392
1906 ..	120,379	120,168	80,650	321,197
1907 ..	180,917	96,402	61,666	338,985
1908 ..	241,006	211,431	76,200	528,637
1909 ..	207,146	104,250	49,320	360,716
1910 ..	231,150	129,973	43,400	404,523
1911 ..	329,322	344,395	148,595	822,312
1912 ..	332,168	165,329	97,142	594,639
1913 ..	374,594	166,477	112,138	653,209
1914 ..	372,633	268,542	94,372	735,547
1915 ..	397,567	305,154	33,750	736,401
1916 ..	131,859	99,173	49,620	280,652
1917 ..	106,265	196,915	49,399	352,579
1918 ..	2,457	187,748	652	190,857
1919 ..	422,681	307,212	47,869	797,762
1920 ..	288,720	292,627	61,543	642,890
1921 ..	23,970	422,120	nil	446,090
1922 ..	228,612	225,851	50,120	504,583
1923 ..	29,256	510,919	nil	540,175
1924 ..	81,590	234,957	23,342	344,907
1925 ..	185,607	81,844	nil	267,451
1926 ..	297,023	126,014	4,337	427,374
1927 ..	220,095	224,588	nil	444,683
1928 ..	161,360	113,492	1,506	276,358
1929 ..	250.357	436,892	23,463	710,712

EXPORTS OF SUGAR.

The following Table gives the Exports of Sugar from the Presidency for the 30 years 1900—1929.

Year	Tons
1900 ..	7,494
1901 ..	12,146
1902 ..	16,624
1903 ..	13,511
1904 ..	12,225
1905 ..	12,042
1906 ..	15,191
1907 ..	14,178
1908 ..	11,044
1909 ..	12,027
1910 ..	12,510
1911 ..	11,139
1912 ..	10,554
1913 ..	11,312
1914 ..	9,946
1915 ..	8,311
1916 ..	16,106
1917 ..	15,048
1918 ..	9,105
1924 ..	11,015
1919 ..	12,483
1920 ..	10,592
1921 ..	9,648
1922 ..	10,717
1923 ..	9,699
1925 ..	15,043
1926 ..	15,651
1927 ..	17,363
1928 ..	18,610
1929 ..	12,736

RETURN OF AGRICULTURAL PRODUCE EXPORTED FROM THE PRESIDENCY OF ST. KITTS-NEVIS FOR THE YEAR ENDED 31ST DECEMBER, 1929.

Article.	Quantity.	Value.
Sugar, crystals	12,736 tons	£150,153
Syrup	8,970 gallons	299
Molasses		
Cotton, Sea Island ..	690,068 lb. lint	66,407
Cotton Seed	383 tons	1,317
Coconuts	1,668	10
Copra	nil	
Hides and Skins ..		391
Salt	1,276 tons	2,373
(Hides and Skins	..	391)
Horses	12	96
Mules	6	48
Asses	10	10
Sheep	313	184
Cattle	44	408
Swine	42	24

DETAILS OF ADMINISTRATION.

EXPENDITURE AND REVENUE.

EXPENDITURE.

Personal Emoluments	£832	15	9
Travelling Allowances	116	3	4
Experiment Stations	197	11	3
Sugar cane, cotton & other experiments	212	6	0
Apparatus, chemicals and books	59	15	3
Contingencies	28	9	6
Destruction wild cotton & cotton pests	73	12	2
Government Cotton Seed Farm	1,000	3	7
Grant-in-aid of Agricultural Shows	125	0	0
Zebu Bulls	58	11	1
	£2,704	7	11

REVENUE.

Experiment Station	£ 48	4	7
Government Cotton Seed Farm	1,566	3	11½
	£1.614	8	6½

OFFICIAL VISITS.

His Excellency the Governor, Lt.-Colonel T. R. St. Johnston, C.M.G., His Honour the Administrator, T. C. Macnaughten Esq., C.B.E, C.M.G., Professor H. A. Ballou, Commissioner of Agriculture, Mr. G. A. Jones, Assistant Commissioner of Agriculture and Dr. Myers visited the Department during the year under report.

METEOROLOGY.

The following are summaries of the observations recorded at the Experiment Station, La Guerite, during the year under review.

Barometric Pressure. During 1929 the mean pressure corrected for temperature and gravity and reduced to sea-level at 9 a.m. was 30·005 and at 3 p.m. 29·967, the highest recorded being 30·146 on February 22nd and the lowest 29·756 on October 30th.

Temperature. The mean maximum temperature for the year was 82·9 F = and the mean minimum 74·3 F. The maximum extreme for the year—88 F.—was registered on October 1st, 2nd, 15th, 17th, and 18th and the maximum extreme—66 F.—was registered on January 30th and March 14th and 16th. The mean average temperature was 78·6 F. and mean monthly range 15 F.

Humidity. The mean relative humidity was at 9 a.m. 71·3% and at 3 p.m. 68·6%.

Rainfall. The total rainfall measured at the Experiment Station was 43·42 inches. This fell on 187 days, the greatest fall being 1·76 inches on November 7th. The total average rainfall for the year 1929 from 28 stations was 52·55 inches, the average rainfall for the island for the years 1914—1929 being 54·33 inches.

Rainfall Returns for St. Kitts for Year 1929.

Name of Station.	January	February	March	April.	May.	June.	July.	August.	September	October.	November.	December.	Total.
Wingfield	5·50	2·91	9·48	6·28	4·26	4·73	5·07	7·97	5·43	7·33	6·04	9·99	71·98
Cranstouns	4·94	2·62	7·61	3·19	8·44	3·70	9·25	4·54	5·76	5·23	10·51	5·14	70·93
Belmont	3·79	2·95	6·76	5·74	5·00	5·27	4·38	6·75	5·14	8·87	10·65	5·55	70·85
Sir Gillies	5·85	3·21	7·50	3·93	7·44	4·17	6·69	3·97	3·13	5·60	8·94	6·03	66·46
Lodge	4·14	1·02	6·88	3·61	5·50	3·19	5·03	8·36	3·64	7·97	9·62	6·49	65·45
Willets	2·99	1·56	5·47	4·75	3·17	3·94	3·80	3·73	7·44	6·87	12·09	6·68	62.49
Caines	2·34	1·44	8·26	3·61	4·85	4·72	4·65	8·41	2·22	6·19	10·63	4·32	61·64
Molineux	3·86	0·62	5·35	4·91	4·76	3·99	4·30	6·60	4·32	7·65	8·21	6·65	61·22
Bourkes	4·24	1·58	6·56	4·86	4·07	5·12	3·64	4·80	3·98	6·28	6·94	5·58	57·66
Stapleton	3·68	0·90	7·68	0·95	3·38	4·22	4·12	9·30	3·28	3·69	7·21	7·23	55·64
Brighton	2·70	0·63	6·25	3·32	4·26	3·08	4·43	7·25	3·93	5·26	7·24	6·58	54·93
Fountain	2·78	1·11	5·45	2·22	4·60	3·52	4·12	11·44	3·20	2·33	9·54	4·57	54·88
Brothersons	3·83	1·65	4·38	3·75	4·60	3·98	3·73	4·05	5·10	6·57	8·79	4·18	54·61
Mansion	3·33	0·74	4·51	2·95	5·58	3·13	4·80	5·39	3·76	5·95	9·38	5·19	54·21
Cunninghams ...	3·07	0·95	6·86	3·17	4·89	2·95	4·23	7·08	2·95	4·72	7·20	5·80	53·87
La Vallee	2·70	2·36	4·80	2·80	4·30	2·87	3·35	3·20	7·30	3·65	10·00	5·20	52·33
Mills	2·88	1·27	5·33	2·30	3·74	2·91	3·81	7·16	3·08	5·11	8·02	4·93	50·54
Belleyne	2·98	0·95	4·78	2·39	3·04	4·15	3·64	5·39	2·50	3·12	8·66	4·14	45·74
Douglas	2·22	0·74	6·21	1·71	2·49	3·68	3·43	6·66	2·92	2·48	7·53	4·31	44·38
Buckleys	2·34	1·07	5·31	1·86	2·38	3·52	3·60	6·63	1·78	3·34	8·00	4·54	44·37
West Farm	2·46	0·74	6·16	1·94	1·93	4·58	3·34	5·56	2·01	3·22	6·98	4·82	43·74
Lower Bourryeau ..	3·13	1·13	5·16	2·60	3·11	1·79	3·43	5·23	2·34	4·19	7·14	3·91	43·46
La Guerite	2·54	1·24	5·20	1·23	2·57	4·02	3·14	6·15	2·60	3·13	7·21	4·39	43·42
Estridge	1·80	0·68	4·28	2·51	3·98	2·70	4·47	3·31	3·41	4·26	7·73	4·26	43·40
Frigate Bay	1·39	0·95	3·60	1·83	2·59	3·15	2·37	4·81	6·81	2·34	5·39	2·78	38·01
St. Kitts Factory ...	1·73	0·79	2·75	1·49	2·59	3·23	3·15	5·70	2·85	2·76	6·11	3·82	36·47
Canada	1·56	0·48	4·10	0·99	1·39	2·46	2·78	5·89	2·91	2·23	5·51	4·20	34·50
Pond	1·88	0·62	2·70	0·50	3·10	3·55	2·66	6·54	1·67		6·00	3·28	32·50

AVERAGE MONTHLY RAINFALL, 1929.

	Inches.
January	3.09
February	1.21
March	5.69
April	2.90
May	3.96
June	3.65
July	4.12
August	6.14
September	3.77
October	4.67
November	8.19
December	5.16

AVERAGE RAINFALL, 1914–1929.

In 1914 the average rainfall on 31 stations was 55.92 inches.

1915	„	„	„	32	„	„	75.59 „
1916	„	„	„	35	„	„	69.51 „
1917	„	„	„	33	„	„	43.53 „
1918	„	„	„	30	„	„	52.44 „
1919	„	„	„	29	„	„	62.84 „
1920	„	„	„	28	„	„	37.13 „
1921	„	„	„	29	„	„	47.09 „
1922	„	„	„	33	„	„	44.84 „
1923	„	„	„	30	„	„	34.58 „
1924	„	„	„	28	„	„	68.13 „
1925	„	„	„	32	„	„	43.54 „
1926	„	„	„	27	„	„	62.57 „
1927	„	„	„	29	„	„	64.36 „
1928	„	„	„	29	„	„	53.25 „
1929	„	„	„	28	„	„	52.55 „

The average rainfall for 16 years is 54.33 inches, so that the rainfall for the year 1929 is 1.78 inches below the average.

Latitude 17 20′ N. METEOROLOGICAL REPORT FOR 1929. Heights Barometer 157 feet

Longitude 62° 45′ W AGRICULTURAL DEPARTMENT, ST. KITTS. Above M.S.L Rain Guage 152″

Months	Barometric Pressure, reduced to Sea-Level, 32 Fahrenheit and corrected for Gravity.					Temperatures.								Vapour pressure. Ins. of Mercury.			Relative Humidity per cent.			Inches Rainfall.	No. of days on which Rain fell.
	9 a.m	3 p.m.	Mean.	Highest.	Lowest.	Maximum Mean.	Minimum Mean.	Maximum Extreme.	Minimum Extreme.	Mean for Month.	Range for Month.	Dew Point 9 a.m.	Dew Point 3 p.m.	9 a.m	3 p.m.	Mean.	9 a.m.	3 p.m.	Mean.		
January ..	30·054	29·980	30 017	30·130	29·873	80·4	72·3	82	66	76 3	16	66	67	651	·636	·644	68·5	63·5	66 0	2·54	19
February ...	30 005	29 994	29·999	30 146	29 923	81·2	70·7	83	68	75·9	15	67	66	·654	·651	·653	67·5	65·0	66·2	1·24	13
March ...	30 052	29·989	30·020	30·125	29·913	80·5	70·2	83	66	75 3	17	68	67	·644	·668	·656	69·5	66 5	68 0	5·20	17
April ...	30·051	29 970	30 010	30 127	29·906	82·1	79·9	85	69	81·0	16	67	66	641	·632	·637	63·5	58·5	61·0	1·23	6
May ...	30·051	29 998	30 024	30·100	29·929	82·6	73·2	85	69	77·9	16	69	70	·745	·742	·744	72·5	67 0	69·7	2 57	17
June ...	30·037	29·989	30·013	30 089	29·928	84·0	75 5	87	73	79·7	14	74	75	·819	·858	·839	77·0	77 5	77·2	4·02	17
July ..	30·005	30 019	30 012	30 120	29·965	84·6	75 9	87	73	80·2	14	73	73	822	·810	·816	74·0	70·5	72 2	3·14	18
August ..	30·004	29·974	29 989	30·053	29·903	84·4	76 0	87	74	80·2	13	73	73	·849	·819	·834	77·0	72·5	74·7	6 15	21
September	29 957	29 912	29·934	30·013	29 866	85·7	76·6	87	74	81·1	13	73	74	·851	·843	847	70·0	72·5	71·2	2·60	12
October ...	29 948	29·874	29 911	30 019	29·756	86.2	75 7	88	74	81·0	14	72	73	·819	·816	·818	70 0	69 5	69·7	3·13	15
November ..	29 961	29 891	29 926	30·031	29·784	83·0	74·8	85	72	78·9	13	71	71	·774	·736	·755	73·5	69·5	71·5	7·21	12
December ..	30 054	29 974	30 014	30·098	29·931	81·0	71·1	83	67	76·0	16	69	68	736	·707	·722	73·0	70·5	71·7	4·39	20
Means ...	30·005	29·967	29·986			82·9	74·3	85	70	78·6	15	70 2	70·2	·750	·743	·747	71·3	68·6	69·9	43·42	187

REPORT OF THE AGRICULTURAL INSTRUCTOR, NEVIS,

FOR THE YEAR ENDED MARCH 31, 1930.

WORK IN THE NURSERY AND DISTRIBUTION OF PLANTS.

The ornamental border and hedges have been kept in good order during the year. In the nursery, work in connection with the raising of suitable fruit trees by grafting and budding was continued.

The total number of plants distributed during the year was 1,697, which consisted of 165 fruit trees and 1,491 shade and timber trees and 41 ornamental plants.

PLOT EXPERIMENTS AT THE EXPERIMENT STATION.

Experiments with various economic and food crops are continued at the experiment station, and seeds and cuttings of the varieties which have given best results are distributed to growers about the island.

The following is a list of seeds, cuttings &c. which were distributed during the year:—

Onion	194,936	Seedlings.
Tomato	8,056	„
Cabbage	3,275	„
Egg-Plant	690	„
Kohl-rabi	763	„
Sweet Potato	5,005	cuttings.
Cassava	1,160	„
Pine Apple Slips	182	„
Cane Plants	190	„
Manila Plants	74	„
Peas and Beans	18	lb.
Yams	9	„
Eddoes	75	„
Guinea Corn	1	„
Vegetable Seeds	4	pks.

CASSAVA.

Experimental plots of the following varieties of cassava were grown at the station:—French No. 3, Black Stick, Na-

tive Sweet, and Bitter No. 1. French No. 3 and Native Sweet proved the best varieties, and they are both early maturing.

SWEET POTATO (YELLOW JERSEY.)

This variety of sweet potato is the one required in the Canadian market.

A plot of half an acre was planted on October 30th 1929. The weather following was not very favourable and the crop did not turn out well. It is found that this variety is very much more difficult to establish than the local varieties and requires more constant weeding as it does not cover the ground and keep down weeds as most of the other varieties do.

The crop was reaped by the end of March 1930, and a yield at the rate of 2810 lb. of potatoes obtained, of which only 40% were the right size and shape for shipment—the greater part of the crop being too small. It is however believed that better results will be obtained if this variety were grown on beds instead of on banks, and experiments in this direction will be carried out during the coming season. The variety possesses excellent cooking qualities and its flavour is superior to that of any of the local varieties.

TOMATO "BEAUTY."

One-fourth of an acre was planted in this variety of tomato on November 13th, 1929. The plants were grown on stakes, and budded.

The weather was favourable and the crop was free from pests. The vines bore fairly well,, and the fruits were uniform in size and shape. Reaping began towards the end of January 1930 and a yield of 2,124lbs. of tomatoes obtained, being at the rate of 8,496lbs. per acre.

Smaller plots of Globe, Earliana, and Bloomsdale varieties were also planted, but the results from these varieties were not so satisfactory as from "Beauty."

LETTUCE VAR. ICEBERG.

A small plot was planted in this variety of lettuce, and the results were very satisfactory. This lettuce produced a fairly large head and was crisp and tender, and with only a trace of bitterness.

The greater part of the crop was sold to the C.N.S. boats.

EGG-PLANT "BLACK BEAUTY".

A plot, the one-fiftieth part of an acre, in size, was planted in this variety of egg-plant on September 9th, 1929. The plants were set out 2 ft. apart on banks 4 ft. wide. A top-dressing of sheep manure was applied and worked into the soil during farming." The plants made rapid growth, and all lateral buds were removed. Reaping began on November 11th, 1929, and a yield of 287lbs. of very fine fruits were obtained, being at the rate of 14,350 lbs. per acre. No account was taken of the fruits reaped after the end of December, as they were much smaller, but the plants continued bearing up to February when they were destroyed.

SUN HEMP (*Crotolaria juncea*).

Seeds of this plant were obtained from the Experiment Station, St. Kitts, and planted in a plot. The seeds germinated well and made rapid growth, and in a short time formed a very useful green-dressing. The plant also stands up well during dry weather.

COTTON SELECTION.

Work on cotton selection was continued on the same lines as in previous years.

The following table shows the results of the examination of the seed cotton from the plants selected to carry on the selection:—

Plant No.	Weight of seed cotton ozs.	Length of lint inches.
2051	3.0	2.16
2052	2.0	2.00
2053	3.2	2.14
3421	9.5	2.12
3422	11.0	1.92
3423	10.5	2.12

WORK IN CONNECTION WITH INSECT AND FUNGUS PEST AND DISEASES AND THEIR CONTROL.

SUGAR CANE.

Mosaic Disease. No trace of this disease was observed during the year.

Gumming Disease. Very little gumming disease was seen during the year.

Moth Borer. The moth borer appears to be on the increase, and at many places the crop was seriously affected by it.

COTTON.

The cotton crop was planted during the early part of the month of October 1929.

The cotton worm (*Alabama*) made its appearance a little later in the season this year than it did the last, but the attack was very much more severe, especially during the month of January when a great deal of damage was done to most of the fields. Large quantities of Paris Green were used, but the showery weather of January when the attack was most severe made it almost impossible to deal effectively with the pest. The cotton stainer was more plentiful this season than it had been for some time past.

The pink bollworm did not cause any damage to the crop this season, and it was found only at a few places towards the end of the crop.

The same care was exercised in the cleaning up of the cotton fields as in the past, and the cleaning up of the ginneries and store houses had been satisfactorily carried out.

The fumigation of cotton seeds at the ginneries had also been carried out according to Regulations.

INSECTICIDES.

A supply of Paris green and lime was again this season put in stock at the Experiment Station by the Local Government for the benefit of the smaller growers.

Paris green and lime was supplied to 258 small growers, and the total quantity supplied was 1,416lbs. of Paris green and 108 bags of lime. Several of the land owners also had a supply of Paris green and lime on hand to supply peasants growing cotton on the share.

DISINFECTION AND FUMIGATION OF PLANTS AND SEEDS.

In accordance with the provisions of the Plant Protection

Ordinance, 10 consignments of plants and seeds were received at the Experiment Station for fumigation.

EXPERIMENTS WITH SUGAR CANE VARIETIES.

Experimental plots of variety canes on the estates have been discontinued, but a small plot of the best varieties is grown at the Station for distribution to peasants.

PROGRESS IN CHIEF INDUSTRIES.

Reaping of the 1928-29 cotton crop was continued to the end of June, as the crop was held over for a second picking. The total production of lint was 406,916lb., being an average at the rate of 271lb. of lint per acre, from 1,500 acres. The same care was exercised in the cleaning up of the cotton fields and ginneries as in the past, and most of the plots were better prepared.

The acreage planted in cotton during the year under report, 1929-30 was about 2,500 acres, of which over 2,000 acres were grown by peasants.

The crop was nearly all planted during the early part of October 1929. The seed germinated well, and although the crop in some parts of the island was kept back from want of sufficient rain, it made rapid progress from November on when the weather became more favourable.

Up to the end of December there was every prospect of a fine crop, but during the month of January 1930 the crop was severely attacked by the cotton worm, and in spite of every effort to keep the pest under control, a great proportion of the crop was badly damaged. The month of January too, was very showery which not only made it more difficult to deal with the cotton worm, but also caused chilled bolls. The weather suddenly changed to dry in February and continued so up to the end of March which causes extensive boll shedding. The yield, consequently, will be far below what was expected. Cotton picking began in February 1930 and the crop is estimated at 120lb. of lint per acre.*

While the cotton planted in October and November is more or less severely attacked by the cotton worm, yet the yields up

*Final figures indicate a crop of 274,000lbs. lint, a yield of 111lbs. per acre. Com. Agr.

to the present have been better than when the crop was planted earlier in the year, as the following table shows:

Year.	Yield per acre lint lb.	Acreage.	Planting Time.
1919 ..	2500	75	April.
1920 ..	3000	140	June.
1921 ..	1000	90	July.
1922 ..	2500	100	April.
1923 ..	3000	40	March.
1924 ..	2500	24	February.
1925 ..	1500	60	November.
1926 ..	1500	106	November.
1927 ..	876	120	November.
1928 ..	1500	271	October.
1929 ..	2500	111	October.

The sugar industry of the island is in a very low state. Practically all the estates have given up the growing of canes, and the little now grown is grown by peasants. The acreage under canes during the year was not more than 300 acres and the acreage for next crop will be further reduced. The chief cause of the decline of the sugar industry is lack of satisfactory means of disposing of the canes. The machinery of the island is all in bad order and requires in the neighbourhood of 20 tons of canes to make a ton of sugar, and it is rather expensive to ship canes to the St. Kitts factory under present conditions. The peasants are very much attached to the sugar cane, and the industry will quickly revive if better machinery is put up in the island or greater facilities offered to get the canes across to the St. Kitts factory.

The shortage of labour in the island is largely due to the decline of the sugar industry, as most of the able-bodied labourers, through lack of employment, had to leave the island. A scheme for the erection of a small sugar factory for the island was suggested to Lord Olivier's Commission. This factory was calculated to manufacture sugar for local consumption chiefly, and to make fancy syrup. It was estimated that under present conditions from 300 to 400 tons of sugar were used in the island annually, and the market for syrup is fairly regular. Such a factory will have the effect of restoring the cane industry of the island, increase the supply of labour, and greatly facilitate the development of subsidiary industries such as fruit, vegetables, &c.

COCONUTS.

It will be some years before the coconut plantations of the island recover from the effects of the 1928 hurricane. The supplies are coming along fairly well, but the standing trees have not yet returned to normal bearing.

At Cane Garden 105 acres were recently planted in coconuts, and the total acreage under coconuts is now 770 acres.

PROGRESS IN MINOR INDUSTRIES.

LIVE STOCK.

The live stock of the island continue in good health, but again this year a large number of animals died during the dry weather from lack of sufficient food.

The Kentucky Jack at Fothergills estate continues in good health and condition, and is doing good service.

The stock market during the year was pretty stagnant, and there was practically no sale for cattle and mules.

The two pure-bred Zebu bulls kept at the Experiment Station continue in good health and condition. Both animals are now on service and the total number of cows served during the year was 113. Many calves from bull No. 165 were born during the year, and they are all very promising animals.

VEGETABLES.

The usual ground provisions were grown by the peasants during the year, but the acreage planted was smaller than usual. Small plots of vegetables such as tomatoes, cabbages, onions &c., were also grown by the peasants and the results generally have been satisfactory.

There was no shipment of vegetables to Canada this year as the Fruit and Vegetable Growers Association did not come into operation. Arrangements, however, have been made for the establishment of a Government Bureau under the Agricultural Department to handle vegetables for the Canadian market during the coming season.

EXTENSION OF INTEREST IN AGRICULTURAL MATTERS.

A very successful Agricultural Show was held on February 28th, 1930. There were over 800 exhibits, which were all

of a high standard. Most of the exhibits were sent in by peasants.

AGRICULTURAL EDUCATION.

Greater interest is now taken in the school gardens, and at some schools very creditable work is being carried out. The school exhibits at the Agricultural Show were particularly good.

The Agricultural Instructor pays visits to the schools and offers advice as regard the work on the school gardens.

CORRESPONDENCE AND DISTRIBUTION OF INFORMATION ON AGRICULTURAL MATTERS.

The usual correspondence in connection with the work of the Department has been carried on.

Regular visits are paid by the Agricultural Instructor to the estates and peasants cultivation in the different parts of the island, and advice as to crops and to methods of dealing with pests offered.

The Agricultural and Commercial Society of which the Agricultural Instructor is Honorary Secretary held eleven meetings during the year, and the following were the chief matters discussed:—Formation of W.I. Cotton Growers' Association, Agricultural Loans Bank, Trade with Canada, Central Sugar Factory for Nevis, Agricultural Show.

OFFICIAL VISITS.

Professor H. A. Ballou, M.Sc. Commissioner of Agriculture for the West Indies, visited the island on September 27th, 1929. Mr. G. A. Jones, Assistant Commissioner of Agriculture for the West Indies, visited the island on July 25th 1929. Mr. Jones remained in the island for 4 days, during which time he met most of the estate owners and also many of the smaller growers and discussed with them matters of agricultural interest to the island.

His Honour the Administrator, Mr. T. C. Macnaghten, C.M.G., C.B.E., visited the station on October 1st, 1929.

Mr. R. E. Kelsick, Agricultural Superintendent, St. Kitts-Nevis, visited the island five times during the year.

The Hon. A. C. K. Tibbits, Warden, Nevis, visited the station on several occasions during the year.

Lord Olivier's Sugar Commission visited the island on October 29th, 1929.

PUBLICATIONS RECEIVED.

The following publications have been regularly received and are hereby gratefully acknowledged:

The Journal of the Imperial College of Tropical Agriculture; Journal of Agricultural Research, and the Experiment Station Records, United States Department of Agriculture; Journal of the Empire Cotton Growing Corporation; Journal of the Agricultural Society, Jamaica; Journal de la Station Agronomique, Guadeloupe; Report of the Local Department of Agriculture, Barbados; Report of the Experiment Station, Porto Rico; Climatological Report, San Juan, Porto Rico.

REPAIRS TO BUILDINGS.

The verandah to the east of the office which was blown away by the 1928 hurricane was replaced. Two new shutters were put to the office, the floor replastered, and the sides to the north and east reshingled. A new thermometer screen was also made.

STAFF CHANGE.

There was no change of staff during the year.

METEOROLOGICAL RETURNS.

The total rainfall for the year 1929-30 was 46.78 inches. Rain fell on 125 days during the year, and the heaviest fall recorded for any one day was 2.50 inches which occurred on January 11th, 1930.

The following tables show the monthly rainfall at the Experiment Station for the year under report and also that for the past twenty-four years 1906—1929:—

Month 1929.	Rainfall Inches.	No. of days on which rain fell.	Max. fall for any one day.
April	2.12	3	1.56 (1st.)
May	3.10	15	1.07 (14th.)
June	2.58	8	.71 (25th)
July	6.95	16	1.60 (21st.)
August	5.21	12	1.39 (12th.)
September ..	2.69	7	.82 (27th.)
October ..	3.45	11	1.24 (4th.)
November ..	5.07	13	.97 (18th.)
December ..	5.57	19	.58 (6th.)
1930.			
January ..	9.05	16	2.50 (11th.)
February ..	.65	4	.29 (26th.)
March	.34	1	.34 (18th.)
	46.78	125	

RAINFALL AT THE EXPERIMENT STATION, NEVIS, FOR THE PAST TWENTY-THREE YEARS 1906–1929.

	January.	February.	March.	April.	May.	June.	July.	August.	September	October.	November.	December.	Total.
	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins	Ins.	Ins.	Ins	Ins.	Ins.
1906	3·28	2·22	1·71	2·19	3·49	7·30	4·11	2·94	18·93	3·10	3·42	6·67	60·11
1907	3·22	2 32	1·23	1·08	3·30	4·12	4 86	2·64	3·76	6·92	2·54	7·46	43·45
1908	2·58	1·70	7·16	2·18	4·24	2·83	3·34	5·02	6·98	1·44	6·93	6·10	50·50
1909	3·86	3·46	·96	2·72	1·62	9·52	4·52	8·71	3 46	7 38	2·44	2·74	50·69
1910	5·24	3·82	1 33	·44	1·08	4·24	2.80	7·10	7·00	1.86	3·32	4·68	41·91
1911	6·38	2·78	2·32	1·02	4·08	·92	2·72	2·34	5·20	3·58	2·80	8.84	46·08
1912	3 84	·68	2·36	4·20	·79	2·51	3·56	3·46	3·19	5 25	6·43	2·85	39·42
1913	7·18	1·96	4·14	·81	4·47	2·23	1·77	4 92	3 59	3·89	4·41	3·36	42·64
1914	3·40	2·74	3 10	2·52	6·29	2·65	5·16	4·72	2·20	4 17	12·44	4·16	53·55
1915	4·40	2·03	·28	5·65	2·79	2·52	8·14	4 34	4·71	5 88	5·37	5·89	52 10
1916	4·53	3 99	2 19	·75	3·82	2 07	11·54	7 81	2·00	10 86	6 74	1 74	64 04
1917	1·39	3 28	2 57	1·00	4 27	6·73	3·46	4·02	8·18	5·00	2·11	2·09	44·10
1918	2·18	3·27	2·75	2·59	6·14	2·02	4·08	5·12	6·21	6·36	10·98	2·28	53·98
1919	2·22	1·16	1 33	2·79	2·10	2·29	4 02	1·66	2·10	8·41	7·22	2·89	38 22
1920	3·71	2·86	1 25	·62	1·22	2·22	1·79	4·61	6 05	6·76	3·30	4·39	38·18
1921	5·84	2·79	3·86	1·40	·82	·80	4·94	6·58	4·20	7·34	3·66	3 95	46·18
1922	1·75	1·80	4·71	3 33	1·95	3·09	4·05	3·88	6 84	4·27	2·14	5 81	13·62
1923	1 51	2·41	7·42	2 04	.45	5·62	1·85	2 63	1·16	5·28	1·23	3·16	2·76
1924	2·46	3·29	·05	2·49	1·58	2·48	4·50	24·35	4·05	5 11	3·57	1·71	58 61
1925	2·65	·99	1·49	1·06	1·64	1·92	35 3	4 81	4·12	6·94	2·74	·31	32 29
1926	2·08	1·97	1·78	3·42	11·77	2·92	3 89	4·94	6 24	7·15	3·62	3·59	56·37
1927	4·44	1·46	4·01	2·79	9·32	2·60	6·52	3·48	4 48	10 05	5·69	1·22	56·06
1928	2·87	2.10	3·21	3·78	1 31	3·96	4·06	2·59	*1 98	5 84	4·07	1·37	40·17
1929	3·92	2 52	5·38	2·12	3·10	2 58	6 95	5·21	2·69	3·45	5·07	5·57	48·56

The average rainfall for the last Twenty-four years was 47 21 inches.
*Rainfall during hurricane of September 21, 1928, not available.

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